

[54] METHOD AND APPARATUS FOR  
OPTIMIZING SYSTEM OPERATIONAL  
PARAMETERS

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[57] ABSTRACT

Method and apparatus for optimizing the operational  
state of a system employing iterative steps that approxi-  
mately follow a projective scaling trajectory or an af-  
fine scaling trajectory, or curve, in computing from its  
present state,  $x_0$  to a next state  $x_1$  toward the optimum  
state. The movement is made in a transformed space  
where the present (transformed) state of the system is at  
the center of the space, and the curve approximation is  
in the form of a power series in the step size. The pro-  
cess thus develops a sequence of tentative states  $x_1, x_2,$   
 $x_n \dots$ . It halts when a selected suitable stopping cri-  
terion is satisfied, and assigns the most recent tentative  
state as the optimized operating state of the system.

12 Claims, 9 Drawing Sheets

